34. (New) The aqueous coating composition of claim 26 wherein the binder is a thermosetting binder selected from the group consisting of a polyester, a polyurethane, an epoxy, latex and combinations thereof.

35. (New) The coating composition of claim 34 wherein the thermosetting binder includes a film-forming polyurethane.

Remarks

To further prosecution of the present application, Applicants have amended claims 3, 5 and 20, and cancelled claim 6. In addition, Applicants have added new claims 27-35. Claims 3, 5, 20, 24, 26 and 27-35 are presently pending with claims 24 and 26 being in independent form.

Rejection of Claims 3, 5, 6, 20, 24 and 26 under 35 U.S.C. 102(b)

Claims 3, 5, 6, 20, 24 and 26 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 4,466,151 to Barch et al. (hereinafter "Barch"). Claim 6 has been cancelled herein. Applicants respectfully traverse the rejection of claims 3, 5, 20, 24 and 26 as being anticipated by Barch for the following reasons.

Independent claim 24 has been amended herein and is directed to a coating composition for an article comprising a superabsorbent water-soluble polymer precursor in aqueous solution. The superabsorbent water-soluble polymer precursor is a polyacrylate selected from the group consisting of water-soluble polyacrylates that cross-link when heated

within a range of temperature that permits a cross-linked polyacrylate formed therefrom to absorb water upon contact and to desorb water when dry.

Barch discloses chemical compositions or sizings for treating surfaces of glass fibers. Such chemical treating compositions or sizings, when applied to surfaces of glass fibers, adjust the surface tension of the glass fiber surfaces to promote fiber continuity and rigidity. Fiber continuity and rigidity prevents the tendency of the glass fibers to clump together. A layer or mat of the coated/treated glass fibers can be used as a coating applicator to apply a uniform application of a coating. (col. 5, lines 15-23.) The chemical compositions or sizings of Barch include a solution, emulsion, dispersion or mixture having at least a carrier, e.g., water, a film-forming polymer and a compatible coupling agent. Nonexclusive examples of film-forming polymers include thermoplastic and thermosetting polymer materials such as polyurethanes, acrylic polymers and polyacrylamide. (col. 6, lines 10-49.)

However, Barch does not disclose a superabsorbent water-soluble polyacrylate precursor in aqueous solution that cross-links when heated within a range of temperature that permits a cross-linked polyacrylate formed therefrom to absorb water upon contact and to desorb water when dry. Barch discloses only film-forming acrylic polymers that, when applied to glass fibers, affect surface tension of the glass fibers to thereby impart continuity and rigidity to the glass fibers. (col. 5, lines 19-24.) Barch makes no reference to water absorption properties of such film-forming polymers. Barch also does not disclose or suggest use of a superabsorbent water-soluble *polymer precursor* in aqueous solution. In addition, Barch does not disclose any process of curing or cross-linking film-forming acrylic polymers. Further, chemical treating compositions of Barch include a reactive coupling agent that reacts with a film-forming polymer, wherein the reactability of the coupling agent and the film-

forming polymer is necessary to maintain the residue formed therefrom on the glass fibers when applied. (col. 7, lines 7-10.) Claim 24 does not recite and is not directed to a coating composition that requires a coupling agent.

For these reasons, claim 24 is patentably distinguishable from Barch. Accordingly, the rejection of claim 24 under 35 U.S.C. § 102(b) as being anticipated by Barch should be withdrawn.

Claims 3 and 5 are dependent on claim 24 and are patentable for at least the reasons given above. The rejection of claims 3 and 5, therefore, should be withdrawn.

Independent claim 26 was previously presented and is directed to an aqueous coating composition comprising a superabsorbent polymer, wherein said superabsorbent polymer is selected from the group consisting of anionic alkali salts and alkali metal salts of a superabsorbent polymer; a viscosity-modifying agent; and a binder.

Barch does not disclose or suggest an aqueous composition including an anionic alkali salt or an anionic alkali metal salt of a superabsorbent polymer. Nor does Barch disclose or suggest use of an anionic alkali salt or an anionic alkali metal salt of the film-forming polymers disclosed.

Thus, Barch does not anticipate claim 26. The rejection of claim 26 under 35 U.S.C. § 102(b) as being anticipated by Barch, therefore, should be withdrawn.

Claim 20 is dependent upon claim 26 and patentable for at least the reasons given above; therefore, its rejection should be withdrawn.

Rejection of Claims 3, 5, 6, 20, 24 and 26 Under 35 U.S.C. § 102(b)

Claims 3, 5, 6, 20, 24 and 26 Under 35 U.S.C. § 102(b) have been rejected under 35 U.S. § 102(b) as being anticipated by U.S. 4,810,576 to Gaa et al. (hereinafter "Gaa). Claim 6, as noted above, has been cancelled herein. Applicants respectfully traverse the rejection of claims 3, 5, 20 24 and 26 as being anticipated by Gaa for the following reasons.

As described above, independent claim 24 has been amended herein and is directed to a coating composition for an article comprising a superabsorbent water-soluble polymer precursor in aqueous solution. The superabsorbent water-soluble polymer precursor is a polyacrylate selected from the group consisting of water-soluble polyacrylates that cross-link when heated within a range of temperature that permits a cross-linked polyacrylate formed therefrom to absorb water upon contact and to desorb water when dry.

Gaa discloses one or more strands of glass fibers treated with an aqueous chemical composition to improve the integrity of the glass fibers when in a wet condition for improved choppability. The aqueous treating composition has at least one water-soluble, ungelled polymer providing a sufficient viscosity to the aqueous chemical composition to give integrity to the fibers in the strand. Nonexclusive examples of the water-soluble, ungelled polymer include the poly oxyethylene polymer, and include other polymers such as polyacrylic acid neutralized with base, polyacrylamides, polyvinylpyrrolidone, polyvinyl alcohol, and blends and mixtures thereof. The water-soluble, ungelled polymer has an effective film-forming molecular weight, e.g., at least 100,000 Mv, with an upper limit being a practical limitation regarding its solubility, dispersibility or emulsifiability in aqueous solutions.

However, Gaa does not disclose or suggest a superabsorbent water-soluble polyacrylate precursor in aqueous solution that cross-links when heated within a range of

temperature that permits a cross-linked polyacrylate formed therefrom to absorb and to desorb water, as claim 24 recites. In addition, Gaa does not disclose curing or cross-linking the water-soluble, ungelled polymer composition. Further, Gaa discloses water-soluble, *ungelled* polymer compositions for use on glass fibers to improve choppability of glass fibers when *wet*, which is contrary to the water absorption properties provided when the superabsorbent, water-soluble polyacrylate precursor in aqueous solution of claim 24 is heated within a range of temperature to thereby form a cross-linked polyacrylate with *water absorption* properties. The resultant coating composition formed from the superabsorbent water-soluble polyacrylate precursor of clam 24 maintains a high gel strength, which is an important coating property, particularly for use with fiber optic cables, whereby the coating has a high water absorption capacity and can wick away moisture to protect inner surfaces of an article.

Thus, claim 24 is not anticipated by Gaa, and is patentably distinguishable therefrom. The rejection of claim 24 under 35 U.S.C. § 102(b) should be withdrawn.

Claims 3 and 5 are dependent on claim 24 and are patentable for at least the reasons given above. The rejection of claims 3 and 5, accordingly, should be withdrawn.

As noted above, claim 26 is directed to an aqueous coating composition comprising a superabsorbent polymer, wherein said superabsorbent polymer is selected from the group consisting of anionic alkali salts and alkali metal salts of a superabsorbent polymer; a viscosity-modifying agent; and a binder.

Gaa does not disclose or suggest use of an anionic alkali salts and alkali metal salts of a superabsorbent polymer in an aqueous coating composition. Thus, claim 26 is patentably distinguishable from Gaa. The rejection of claim 26 under 35 U.S.C. § 102(b), therefore, should be withdrawn.

Claim 20 is dependent upon claim 26 and patentable for at least the reasons given above. The rejection of claim 20 should be withdrawn.

Rejection of Claims 3,6, 20, 24 and 26 Under 35 U.S.C. § 102(b)

Claims 3, 6, 20, 24 and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by WO96/23024 to Kroesbergen (hereinafter "Kroesbergen). As noted, claim 6 has been cancelled herein. Applicants respectfully traverse the rejection of claims 2, 20, 24 and 26 as being anticipated by Kroesbergen for the following reasons.

Kroesbergen discloses a method of providing a substrate with a coating of a super-absorbent material comprising allowing suitable monomers to polymerize in the presence of a catalyst to obtain a polymer solution, adding a cross-linking agent to obtain a pasty composition, applying the composition to a substrate and allowing the applied composition to dry and cross-link to obtain the substrate with the super-absorbent material. In an alternative embodiment, a polymer solution can be prepared by dissolving already formed polymers in an aqueous solution and adding a cross-linking agent composition. Further, an aqueous solution of a pre-cross-linked polymer, e.g., poly(meth)acrylic acid, in the form of a salt and a reactive cross-linking agent are mixed to form a paste that can be applied to a substrate by screen printing.

Unlike Kroesbergen that uses a cross-linker to form a paste or pasty composition from the aqueous solution of a monomer, or a pre-cross-linked polymer, or already formed polymers, the coating composition of claim 24 includes an aqueous solution of a superabsorbent water-soluble polyacrylate precursor that *cross-links when heated.* Kroesbergen uses a cross-linker to form a pasty polymer composition, while the coating

composition of claim 24 does not use a cross linker and includes a superabsorbent water-soluble polymer precursor in aqueous solution that is cross linked by exposure to a range of temperature that does not destroy the water-absorbing properties of the resultant cross-linked polymer. In addition, Kroesbergen forms a paste or pasty composition, while claim 24 recites a coating composition as an aqueous solution. Presumably, the coating composition of claim 24 would provide a more uniform distribution as an aqueous solution than would a paste or pasty composition of Kroesbergen. The use of a cross linker to form a paste or pasty composition may confirm that the final composition may be rather non-uniform. Further, Kroesbergen applies a *paste* of a cross-linked or uncross-linked *polymer* to a substrate, while the coating composition of claim 24 provides as an *aqueous solution* of a *polymer precursor.* These noted differences patentably distinguish the coating composition of claim 24 from Kroesbergen.

Thus, Kroesbergen does not anticipate claim 24. Accordingly, the rejection of claim 24 under 35 U.S.C. § 102(b) should be withdrawn.

Claims 3 and 5 are dependent on claim 24 and are patentable for at least the reasons given above. The rejection of claims 3 and 5 should be withdrawn.

Claim 26 is directed to an aqueous coating composition comprising a superabsorbent polymer, wherein said superabsorbent polymer is selected from the group consisting of anionic alkali salts and alkali metal salts of a superabsorbent polymer; a viscosity-modifying agent; and a binder. Kroesbergen does not disclose or suggest use of an anionic *alkali salt or alkali metal salt* of a superabsorbent *polymer* as a component of an *aqueous coating composition.* Rather, in one example, Kroesbergen discloses a *pasty coating composition* produced from a mixture of an aqueous solution of *poly(meth)acrylic acid* in the form of a

salt and a reacting *cross-linking agent*. The aqueous coating composition of claim 26 is applied to a substrate with the superabsorbent polymer in the form of an anionic alkali salt or alkali metal salt, while the paste composition of Kroesbergen, when applied to a substrate, is the reaction product of the poly(meth)acrylate salt and the cross-linking agent.

Thus, Kroesbergen does not teach the aqueous coating composition of claim 26, which is patentably distinguishable therefrom. The rejection of claim 26 under 35 U.S.C. § 102(b) should be withdrawn.

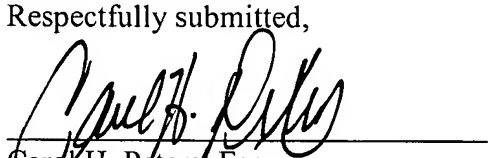
Claim 20 is dependent upon claim 26 and patentable for at least the reasons given above. The rejection of claim 20 should be withdrawn.

Patentability of New Claims 27-35

New claims 27-32 are dependent on independent claim 24, and are patentable for at least the reasons provided above with respect to the patentability of claim 24 in view of the cited prior art references. New claims 32-35 are dependent on independent claim 26, and are patentable for at least the reasons provided above with respect to the patentability of claim 26 in view of the cited references.

Based upon the foregoing amendments and discussion, the present application is believed to be in condition for allowance, and a notice to this effect is respectfully requested. Should the Examiner have any questions concerning this response, he is invited to telephone the undersigned at the telephone number provided.

Respectfully submitted,



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